



January 10, 2014

US Environmental Protection Agency  
Water Enforcement, OES4-SMR  
5 Post Office Square, Suite 100  
Boston, MA 02109-3912

Re: CSO Annual Report / Taunton, MA  
Year 2013  
NPDES Permit No. MA0100897

Dear Ms. Williams:

In accordance with the requirements of NPDES Permit No. MA 0100897, (Part I, Section D.3), Combined Sewer Overflow limitations, I hereby certify that the monthly inspections of the CSO, Outfall 004, for the calendar year 2013 have been conducted, results recorded and records maintained. A work order generation and reporting system is utilized through our computerized operation and maintenance program. A summary of the 2013 CSO maintenance inspections is included as Attachment 1. All records are maintained for at least six years as required by the permit.

The CSO is located on the 40" West Water Street interceptor upstream of the Main Lift pump station. It is located behind the Taunton Municipal Light Plant at 500 West Water Street (Latitude: 41.880707, Longitude: 071.093336). The overflow structure contains an overflow weir and scum baffle. Discharge is to an outfall manhole containing a bar rack. The overflow weir is set at two elevations in the overflow structure. Pressure sensors are located on the sewer side of the weir wall and in the 48" outfall pipe. An ultrasonic probe is also located on the river side of the weir. When the level in the 40" combined sewer exceeds the weir levels, overflow to the Taunton River occurs. The pressure sensors are connected to a Sigma model #930 flow meter which measures the overflow rate and volume. Data obtained by the flow meter is logged into the SCADA system. A duckbill, installed at the outfall in the river, prevents tidal flow from entering the pipe and collection system. A diagram of the CSO structure is included as Attachment 2.

Veolia Water North America, Northeast, LLC  
Taunton Wastewater Treatment Plant  
825 West Water Street  
Taunton, MA 02780  
Phone: 508-823-3582, Fax: 508-880-7566

During the year 2013 there were three CSO events as summarized in Table 1 below.

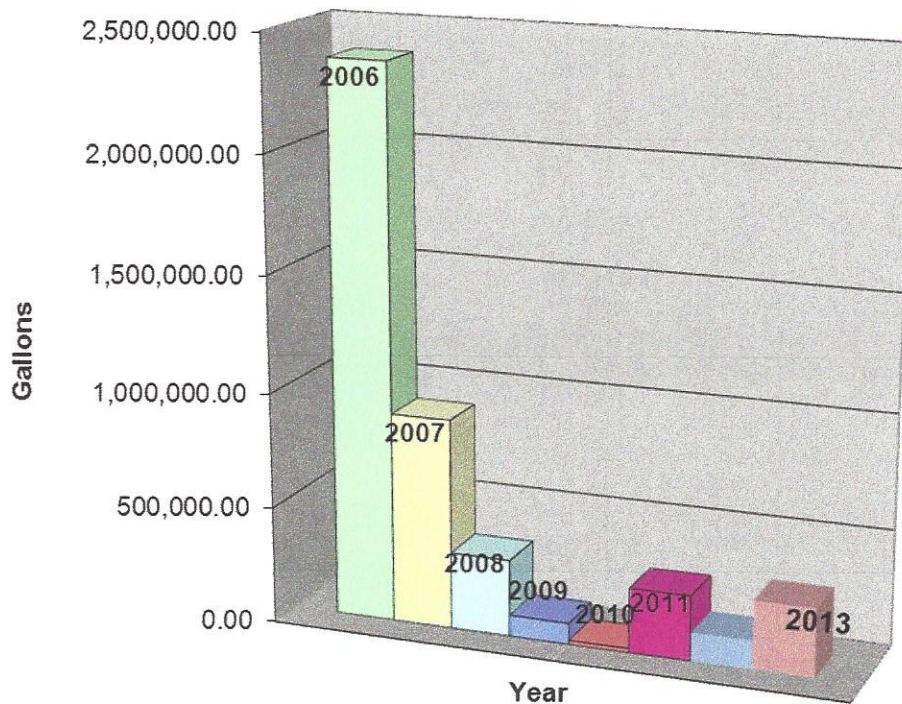
Table 1

	CSO	Duration	
Date	Flow MG	Of Event	Rain inches
3/14/2013	1.971	3/12, 20:38 – 01:01 3/13, 08:40 – 11:50	0.88
6/7 - 6/8	1.276	6/7, 20:45 – 6/8, 14:56	4.36
6/14/2013	0.285	07:28 – 15:47	3.68

Below are 2 graphs of CSO gallons per inch of rain for the past eight years. Graph 1 does not include the record breaking rainfall of late March and early April 2010. Graph 1 clearly illustrates that the gallons of combined sewer overflow per inch of rain continues to decline.

Graph 1

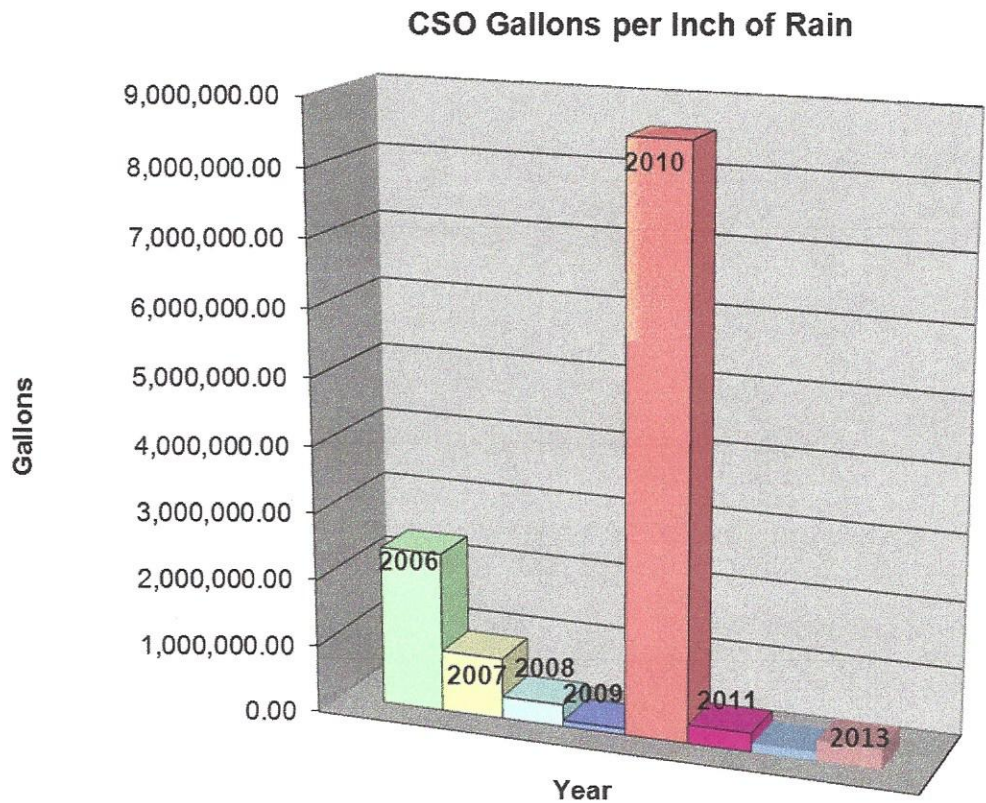
CSO Gallons per Inch of Rain without 100 year storm





Graph 2 illustrates the CSO gallons per inch of rain with the March and April 2010 rain events included. These two rain events exceeded 12 inches of rain in a 3-week period, and both storms were considered a “100 year rain event”.

Graph 2



In 2013, the CSO outfall was active with a rain event of 0.88 inches. This event was a very intense thunderstorm that lasted only a short period of time. This was the minimum amount of rain that resulted in the CSO activating in the past eight years. For comparison purposes, rain events that exceeded 1.5 inches for the past 3 years have been included in the graph, even if they did not result in a CSO event. The data shows that in 2013, there was one other major rain event with 3.12 inches of rain. This did not result in the CSO becoming active. Overall, the frequency of CSO activity as well as the CSO gallons per inch of rain continues to decline. See table 2 below for a summary of data.

Table 2

		CSO		
Year	Date	Flow	CSO Gallons	Rain inches
2006	6/7/2006	13.768	13,768,000	4.65
	6/25/2006	1.471	1,471,000	1.76
2007	2/14/2007	0.355	355,000	1.74
	3/2/2007	0.408	408,000	2.22
	3/17/2007	2.222	2,222,000	2.56
	4/16/2007	5.684	5,684,000	3.02
2008	2/13/2008	0.179	179,000	2.76
	3/8/2008	2.19	2,190,000	2.93
	7/23/2008	0.059	59,000	1.91
	9/6/2008	0.208	208,000	3.78
	9/27/2008	0.008	8,000	4.72
	12/12/2008	3.911	3,911,000	3.79
2009	7/2/2009	0.091	91,000	1.46
2010	2/25/2010	0.053	53,000	3.22
	3/14 - 3/20	63.32	63,320,000	4.96
	3/29 - 4/5	72.849	72,849,000	7.66
2011	2/25/2011	1.1875	1,187,500	2.18
	8/8/2011	0	0	1.7
	8/15/2011	0	0	1.84
	8/28/2011	0	0	1.52
	9/6/2011	0	0	1.75
	9/8/2011	2.4745	2,474,500	2.47
	11/23/2011	0	0	1.79
2012	4/22/2012	0	0	2.12
	8/10/2012	0.96892356	968,924	1.33
	9/5/2012	0	0	4.46
2013	3/14/2013	1.971	1,971,000	0.88
	6/7 - 6/8	1.276	1,276,000	4.36
	6/14/2013	0.285	285,000	3.68
	11/27/2013	0	0	3.12

As the data indicates, the City of Taunton continues to aggressively remove inflow and infiltration from the system. In the past eight years the City has removed an estimated 6 million gallons per day of I/I. A summary report of I/I removed will be detailed in the annual I/I report submitted in February 2014.



Since August 2006, when the City contracted Veolia Water to operate and maintain the sanitary sewer system, the City has cleaned 267 miles of sewer and removed 1178 tons of debris. Please see table 3 below.

Table 3

Yeolia Sanitary Sewer Collection System Contract Summary			
Year	Cleaned Miles	Televised Miles	Debris Removed Tons
1	61.71	9.75	290.98
2	35.65	28.49	261.92
3	26.66	11.71	100.19
4	24.60	18.27	69.84
5	31.42	18.61	112.78
6	33.95	16.36	145.64
7	34.33	17.89	165.17
8	18.82	7.26	31.32
TOTALS	267.13	128.36	1177.84

Removal of debris from the sewer pipes has greatly increased the capacity of the collection system. It is estimated that this has created a hydraulic capacity of 237,877 gpd. (Industry Standard 74 lbs/cu. ft. debris. 27 cu ft = 1 cu yd = 2000 lbs (1 ton) = 7.48 gal/cu ft.)

During this same time period the City spent roughly \$20,000,000 in improvements and repairs to the sanitary sewer and the storm drain systems. The City has committed to spend an additional \$5,500,000 during 2013 to continue repairs, separation and improvements.

In summary, this report shows that the City continues to implement the Nine Minimum Control Program by properly operating and maintaining its sewer system and maximizing use of the collection system for storage. The City, through its subcontractor Veolia Water, has a regular maintenance program to control solid and floatable materials in the CSO. In the event that a CSO does occur, immediate notification is provided to Rhode Island DEM, Massachusetts DEP, Southeast Division and EPA, Boston. During 2013, no dry weather overflows occurred at the CSO (Outfall 004). Veolia Water administers the City's Industrial Pretreatment Program through which industries are permitted, required to conduct self-monitoring, inspected and subjected to random unannounced sampling events. Under the City's Pollution Prevention Program, Veolia Water hosts an annual household hazardous waste collection day. In addition, the City's municipal landfill, operated by Waste Management, collects paints, fluorescent bulbs, and waste oil during all hours of operation.

I certify under penalty of law that I have personally examined and am familiar with the information submitted herein: and based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Sincerely,

A handwritten signature in black ink, appearing to read 'Darlene Domingos', written in a cursive style.

Darlene Domingos,  
Project Manager

Cc: Fred Cornaglia, DPW Commissioner, City of Taunton  
David Burns, DEP SERO  
John Oatley, Area Manager, Veolia Water

Attachments

- 1 – CSO Maintenance Inspection Reports
- 2 – Diagram of the CSO Structure
- 3 – CSO Flow Trends and Totals for Each Event

ATTACHMENT 1

CSO MAINTENANCE INSPECTION REPORTS



## WORK ORDER REPORT

Work Type: PM	Priority: 12
Est. Start Date:	Deficiency Tag:
Required: 31-JAN-13	Task Status: ACTIVE
Requestor: SYNERGEN	Assigned To:
Crew: PSMNT	PUMP STATION MAINTENANCE
Task Desc.: MONTHLY INSPECTION OF EQUIPMENT \ SEWER OVERFLOW STRUCTURE	

 Work Order \*1300007\*  
 1300007

 Task \*01\*  
 01

Page: 1

 Asset: E / 1000000342 - SEWER OVERFLOW STRUCTURE  
 Alias: P01CSO  
 Bldg: CSO - CSO

Loc

Pos:

Task Note Type	Notes
TASKINST	Inspection to include the CSO "structure" with the weir condition, bar rack (screen), duckbill valve and the flowmeter.

RESOURCES:	# of People	Estimated Hours	Actual Hours	Remaining Hours	Completion
Craft					
MAINT	2	1			

MATERIALS:	Qty. Est.	Qty. Used
Store Primary Bin Stock Type / Code Item Description		

## ATTACHMENTS:

PERMITS:	Number	Acquired Date
Type		

## COMPLETION COMMENTS:

Weir looked good  
 BAR RACK looked good  
 Duck Bill looked good  
 Flow meter 0.0  
 Total 289 x 1

ASPHALT OVER MANHOLE  
AT WEIR

Start Date:	Time:	Completion Date:	Time:
-------------	-------	------------------	-------

FAILURE CODES:	Repair:	Component:
Failure:		
Follow-up Action Required:		

Signature: \_\_\_\_\_

Date: 1-31-13

# WORK ORDER REPORT

0.

Work Type: PM	Priority: 12
Est. Start Date:	Deficiency Tag:
Required: 28-FEB-13	Task Status: ACTIVE
Requestor: SYNERGEN	Assigned To:
Crew: PSMNT	PUMP STATION MAINTENANCE
Task Desc.: MONTHLY INSPECTION OF EQUIPMENT \ SEWER OVERFLOW STRUCTURE	

Work Order **\*1300224**  
1300224

Task **\*01\***  
01

Asset: E / 1000000342 - SEWER OVERFLOW STRUCTURE

Alias: P01CSO

Bldg: CSO - CSO

Loc

Pos:

COMPLETED

Task Note Type	Notes
TASKINST	Inspection to include the CSO "structure" with the weir condition, bar rack (screen), duckbill valve and the flowmeter.

RESOURCES:	# of People	Estimated Hours	Actual Hours	Remaining Hours	Completion
Craft					
MAINT	2	1			

MATERIALS:	Store	Primary Bin	Stock Type / Code	Item Description	Qty. Est.	Qty. Us

## ATTACHMENTS:

## PERMITS:

Type	Number	Acquired Date

## COMPLETION COMMENTS:

weir looked ok  
BAR RACK looked OK  
Duck Bill looked OK  
Flow meter OK TOTAL 290 x 1  
TRANSducer looked OK  
man hole raised

Start Date: \_\_\_\_\_ Time: \_\_\_\_\_ Completion Date: \_\_\_\_\_ Time: \_\_\_\_\_

## FAILURE CODES:

Failure: \_\_\_\_\_ Repair: \_\_\_\_\_ Component: \_\_\_\_\_

Follow-up Action Required: \_\_\_\_\_

Signature: \_\_\_\_\_ *WT*

Date: 2-28

# WORK ORDER REPORT

03/22/13 08:33

Work Type: PM	Priority: 12
Est. Start Date:	Deficiency Tag:
Required: 31-MAR-13	Task Status: ACTIVE
Requestor: SYNERGEN	Assigned To:
Crew: PSMNT	PUMP STATION MAINTENANCE
Task Desc.: MONTHLY INSPECTION OF EQUIPMENT \ SEWER OVERFLOW STRUCTURE	

Work Order \*1300345\*  
1300345  
Task \*01\*  
01

Page: 1

Asset: E / 1000000342 - SEWER OVERFLOW STRUCTURE		
Alias: P01CSO		
Bldg: CSO - CSO	Loc	Pos:

Task Note Type	Notes
TASKINST	Inspection to include the CSO "structure" with the weir condition, bar rack (screen), duckbill valve and the flowmeter.

RESOURCES:	# of People	Estimated Hours	Actual Hours	Remaining Hours	Completion
Craft					
MAINT	2	1			

MATERIALS:					
Store	Primary Bin	Stock Type / Code	Item Description	Qty. Est.	Qty. Used

ATTACHMENTS:
--------------

PERMITS:		
Type	Number	Acquired Date

COMPLETION COMMENTS:	<p>weirs looked OK Bar Rack looked OK Duck Bill looked OK ULTRA SONIC looked OK</p> <p>Flow 00 TOTAL 293 x 1 msd</p>		
Start Date:	Time:	Completion Date:	Time:

FAILURE CODES:		
Failure:	Repair:	Component:
Follow-up Action Required:		

Signature: \_\_\_\_\_

Date: 3-28-13



# WORK ORDER REPORT

04/15/13 12:06

Work Type: PM	Priority: 12
Est. Start Date:	Deficiency Tag:
Required: 30-APR-13	Task Status: ACTIVE
Requestor: SYNERGEN	Assigned To:
Crew: PSMNT	PUMP STATION MAINTENANCE
Task Desc.: MONTHLY INSPECTION OF EQUIPMENT \ SEWER OVERFLOW STRUCTURE	

Work Order \*1300472\*  
1300472

Task \*01\*  
01

Page: 1

Asset: E / 1000000342 - SEWER OVERFLOW STRUCTURE	
Alias: P01CSO	
Bldg: CSO - CSO	Loc

Completed  
Pos:

Task Note Type	Notes
TASKINST	Inspection to include the CSO "structure" with the weir condition, bar rack (screen), duckbill valve and the flowmeter.

RESOURCES:	# of People	Estimated Hours	Actual Hours	Remaining Hours	Completion
Craft					
MAINT	2	1			

MATERIALS:	Store	Primary Bin	Stock Type / Code	Item Description	Qty. Est.	Qty. Used

ATTACHMENTS:

PERMITS:	Type	Number	Acquired Date

COMPLETION COMMENTS:
CSO structure coated ok weirs coated ok Bar Rack ok Duck Bill coated ok Flowmeter 293 x 1
ULTRA SONIC COAT OK
Start Date: _____ Time: _____ Completion Date: _____ Time: _____

FAILURE CODES:	Failure:	Repair:	Component:
Follow-up Action Required:			

Signature: \_\_\_\_\_ Date: 4/26/13

# WORK ORDER REPORT

05/01/13 11:28

Work Type: PM	Priority: 12
Est. Start Date:	Deficiency Tag:
Required: 31-MAY-13	Task Status: ACTIVE
Requestor: SYNERGEN	Assigned To:
Crew: PSMNT	PUMP STATION MAINTENANCE
Task Desc.: MONTHLY INSPECTION OF EQUIPMENT \ SEWER OVERFLOW STRUCTURE	

Work Order **\*1300614\***  
**1300614**  
 Task **\*01\***  
**01**

Page: 1

Asset: E / 1000000342 - SEWER OVERFLOW STRUCTURE  
 Alias: P01CSO  
 Bldg: CSO - CSO Loc Pos:

Task Note Type Notes  
 TASKINST Inspection to include the CSO "structure" with the weir condition, bar rack (screen), duckbill valve and the flowmeter.

RESOURCES:	# of People	Estimated Hours	Actual Hours	Remaining Hours	Completion
Craft					
MAINT	2	1			

MATERIALS:

Store	Primary Bin	Stock Type / Code	Item Description	Qty. Est.	Qty. Used

## ATTACHMENTS:

PERMITS:

Type	Number	Acquired Date

## COMPLETION COMMENTS:

weirs looked OK  
 Bar rack OK  
 Duck Bill looked OK  
 ULTRA sonic looked OK  
 Flow 0.0 TOTAL 294 x1

Start Date: Time: Completion Date: Time:

## FAILURE CODES:

Failure: Repair: Component:  
 Follow-up Action Required:

Signature: 

Date: 5-24-13

# WORK ORDER REPORT

06/06/13 11:36

Work Type: PM	Priority: 12
Est. Start Date:	Deficiency Tag:
Required: 30-JUN-13	Task Status: ACTIVE
Requestor: SYNERGEN	Assigned To:
Crew: PSMNT	PUMP STATION MAINTENANCE
Task Desc.: MONTHLY INSPECTION OF EQUIPMENT \ SEWER OVERFLOW STRUCTURE	

Work Order \*1300790\*

Task \*01\*  
01 COMPLETED

Page: 1

Asset: E / 1000000342 - SEWER OVERFLOW STRUCTURE		
Alias: P01CSO		
Bldg: CSO - CSO	Loc	Pos:

Task Note Type	Notes
TASKINST	Inspection to include the CSO "structure" with the weir condition, bar rack (screen), duckbill valve and the flowmeter.

RESOURCES:	# of People	Estimated Hours	Actual Hours	Remaining Hours	Completion
Craft					
MAINT	2	1			

MATERIALS:				Qty. Est.	Qty. Used
Store	Primary Bin	Stock Type / Code	Item Description		

ATTACHMENTS:
--------------

PERMITS:		
Type	Number	Acquired Date

COMPLETION COMMENTS:			
<p>weir looked ok ULTRA some looked ok bar rack looked ok duck bill looked ok Flow 00 TOTAL 296 X1</p>			
Start Date:	Time:	Completion Date:	Time:

FAILURE CODES:			
Failure:	Repair:	Component:	Mode:
Follow-up Action Required:			

Signature: WT Date: 6-27-13



# WORK ORDER REPORT

07/10/13 07:52

Work Type: PM  
 Est. Start Date:  
 Required: 31-JUL-13  
 Requestor: SYNERGEN  
 Crew: PSMNT PUMP STATION MAINTENANCE  
 Task Desc.: MONTHLY INSPECTION OF EQUIPMENT \ SEWER OVERFLOW STRUCTURE

Priority: 12  
 Deficiency Tag:  
 Task Status: ACTIVE  
 Assigned To:

Work Order \*1300986\*  
 1300986

Task \*01\*  
 01

Page: 1

COMPLETED

Asset: E / 1000000342 - SEWER OVERFLOW STRUCTURE  
 Alias: P01CSO  
 Bldg: CSO - CSO Loc Pos:

Task Note Type	Notes
TASKINST	Inspection to include the CSO "structure" with the weir condition, bar rack (screen), duckbill valve and the flowmeter.

RESOURCES:	# of People	Estimated Hours	Actual Hours	Remaining Hours	Completion
Craft					
MAINT	2	1			

MATERIALS:	Store	Primary Bin	Stock Type / Code	Item Description	Qty. Est.	Qty. Used

ATTACHMENTS:

PERMITS:	Type	Number	Acquired Date

COMPLETION COMMENTS: TOTAL 296 X 1  
 Weirs looked ok  
 BAR rack looked ok  
 Duck Bill looked ok  
 ULTRAI sonic looked ok

Start Date: Time: Completion Date: Time:

FAILURE CODES:  
 Failure: Repair: Component: Mode:  
 Follow-up Action Required:

Signature: WT Date: 7-26-13



# WORK ORDER REPORT

09/11/13 08:28

Work Type: PM  
 Est. Start Date: Required: 30-SEP-13  
 Requestor: SYNERGEN  
 Crew: MAINT  
 Task Desc.: MONTHLY INSPECTION OF EQUIPMENT \ SEWER OVERFLOW STRUCTURE

Priority: 12  
 Deficiency Tag:  
 Task Status: ACTIVE  
 Assigned To: MAINTENANCE TECHNICIAN

Work Order \*1301237\*  
 1301237

Task \*01\*  
 01

Page: 1

Asset: E / 1000000342 - SEWER OVERFLOW STRUCTURE  
 Alias: P01CSO  
 Bldg: CSO - CSO

Loc

COMPLETED

Task Note Type	Notes
TASKINST	Inspection to include the CSO "structure" with the weir condition, bar rack (screen), duckbill valve and the flowmeter.

RESOURCES:					
Craft	# of People	Estimated Hours	Actual Hours	Remaining Hours	Completion
MAINT	1				

MATERIALS:						
Store	Primary Bin	Stock Type / Code	Item Description	Qty. Est.	Qty. Used	

## ATTACHMENTS:

PERMITS:		
Type	Number	Acquired Date

COMPLETION COMMENTS:

WEIR LOOKED OK  
 BAR RACK LOOKED OK  
 DUCK BILL LOOKED OK  
 ULTRA SONIC LOOKED OK

FLOW 0.0  
 TOTAL 297 KI

Start Date: Time: Completion Date: Time:

FAILURE CODES:

Failure: Repair: Component: Mode:

Follow-up Action Required:

Signature: 

Date: 9-19-13



## WORK ORDER REPORT

Work Type: PM	Priority: 12
Est. Start Date:	Deficiency Tag:
Required: 01-OCT-13	Task Status: ACTIVE
Requestor: SYNERGEN	Assigned To:
Crew: MAINT	MAINTENANCE TECHNICIAN
Task Desc.: MONTHLY INSPECTION OF EQUIPMENT \ SEWER OVERFLOW STRUCTURE	

Work Order **\*1301352\***  
1301352

Task **\*01\***  
01

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Asset: E / 1000000342 - SEWER OVERFLOW STRUCTURE  
Alias: P01CSO  
Bldg: CSO - CSO Loc Pos:

Task Note Type	Notes
TASKINST	Inspection to include the CSO "structure" with the weir condition, bar rack (screen), duckbill valve and the flowmeter.

RESOURCES:	# of People	Estimated Hours	Actual Hours	Remaining Hours	Completion
Craft					
MAINT	1				

MATERIALS:	Store	Primary Bin	Stock Type / Code	Item Description	Qty. Est.	Qty. Used

## ATTACHMENTS:

PERMITS:	Type	Number	Acquired Date

## COMPLETION COMMENTS:

WELLS LOOKED OK  
BAR RACK LOOKED OK  
DUCKBILL LOOKED OK  
FLOW METER LOOKED OK  
ULTRASONIC LOOKED OK

Flow 0.0

TOTAL 289 X 1

Start Date: \_\_\_\_\_ Time: \_\_\_\_\_ Completion Date: \_\_\_\_\_ Time: \_\_\_\_\_

## FAILURE CODES:

Failure: \_\_\_\_\_ Repair: \_\_\_\_\_ Component: \_\_\_\_\_ Mode: \_\_\_\_\_  
Follow-up Action Required:

Signature: \_\_\_\_\_

Date: 10-16-13

# WORK ORDER REPORT

11/14/13 11:44

*Entered  
11/24*

Work Type: PM	Priority: 12
Est. Start Date:	Deficiency Tag:
Required: 01-NOV-13	Task Status: ACTIVE
Requestor: SYNERGEN	Assigned To:
Crew: MAINT	MAINTENANCE TECHNICIAN
Task Desc.: MONTHLY INSPECTION OF EQUIPMENT \ SEWER OVERFLOW STRUCTURE	

Work Order  
**1301402**



Task  
**01**



Page: 2

Asset: E / 1000000342 - SEWER OVERFLOW STRUCTURE  
 Alias: P01CSO  
 Bldg: CSO - CSO      Loc:      Pos:

Task Note Type	Notes
TASKINST	Inspection to include the CSO "structure" with the weir condition, bar rack (screen), duckbill valve and the flowmeter.

RESOURCES:					
Craft	# of People	Estimated Hours	Actual Hours	Remaining Hours	Completion
MAINT	1				

MATERIALS:					
Store	Primary Bin	Stock Type / Code	Item Description	Qty. Est.	Qty. Used

ATTACHMENTS:

PERMITS:		
Type	Number	Acquired Date

COMPLETION COMMENTS:

*weir coated OK  
 bar rack coated OK  
 duck bill coated OK  
 ultra sonic coated OK  
 flow 0.0      TOTAL 301      x1*

Start Date:      Time:      Completion Date:      Time:

FAILURE CODES:

Failure:      Repair:      Component:      Mode:      Follow-up Action Required:

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

*11/21 WT*

# WORK ORDER REPORT

12/04/13 07:32

Work Type: PM  
 Est. Start Date: Required: 01-DEC-13  
 Requestor: SYNERGEN  
 Crew: MAINT MAINTENANCE TECHNICIAN  
 Task Desc.: MONTHLY INSPECTION OF EQUIPMENT \ SEWER OVERFLOW STRUCTURE

Priority: 8  
 Deficiency Tag:  
 Task Status: ACTIVE  
 Assigned To:

Work Order  
 1301538



Task  
 01



Page: 52

Asset: E / 1000000342 - STRUCTURE, COMBINED SEWER OVERFLOW  
 Alias: P01CSO  
 Bldg: CSO - CSO

Loc

**COMPLETED**

Task Note Type	Notes
TASKINST	Inspection to include the CSO "structure" with the weir condition, bar rack (screen), duckbill valve and the flowmeter.

RESOURCES:	# of People	Estimated Hours	Actual Hours	Remaining Hours	Completion
Craft					
MAINT	1				

MATERIALS:	Store	Primary Bin	Stock Type / Code	Item Description	Qty. Est.	Qty. Used

## ATTACHMENTS:

## PERMITS:

Type	Number	Acquired Date

## COMPLETION COMMENTS:

weirs looked ok  
 bar rack looked ok  
 duck bill looked ok  
 ultra sonic looked ok  
 Flow 0.0  
 TOTAL 303 x1

Start Date: \_\_\_\_\_ Time: \_\_\_\_\_ Completion Date: \_\_\_\_\_ Time: \_\_\_\_\_

## FAILURE CODES:

Failure: \_\_\_\_\_ Repair: \_\_\_\_\_ Component: \_\_\_\_\_ Mode: \_\_\_\_\_  
 Follow-up Action Required:

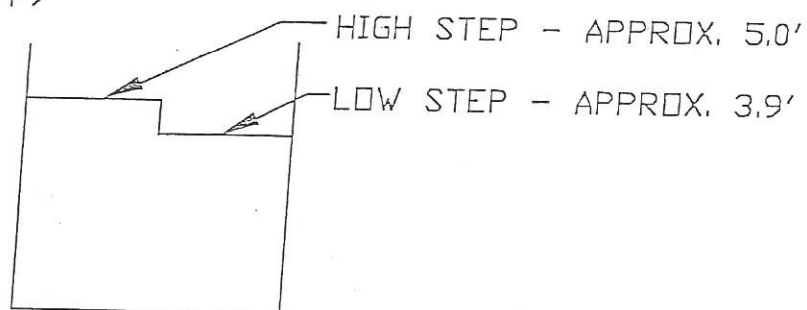
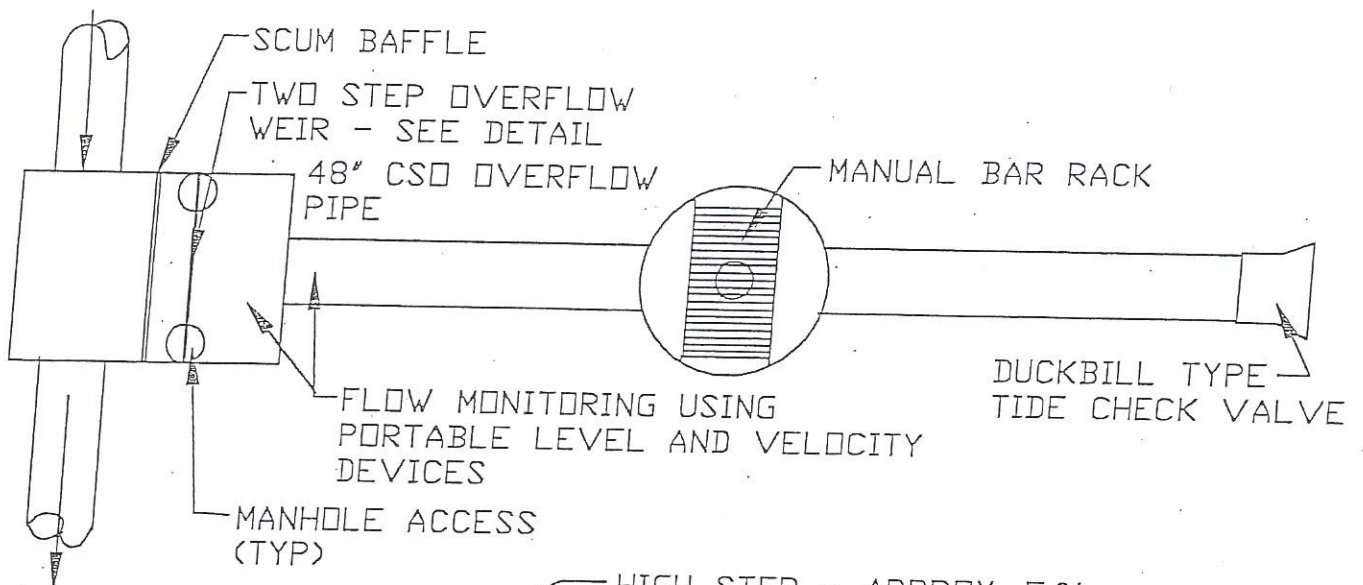
Signature: \_\_\_\_\_

Date: 12-20-13



ATTACHMENT 2  
DIAGRAM OF THE CSO STRUCTURE

40" COMBINED SEWER



DETAIL  
OVERFLOW  
WEIR FROM  
COMBINED  
SEWER SIDE

FIGURE 3.1-2  
COMBINED SEWER  
OVERFLOW

ATTACHMENT 3

CSO FLOW TRENDS AND TOTALS FOR EACH EVENT



# COMBINED SEWER OVERFLOW

WASTEWATER TREATMENT FACILITY, CITY OF TAUNTON, MA

LOGIN

3/14/2013

7:52:04 AM

MAIN LIFT

HIGH FLOW CONTROL

TO TAUNTON  
RIVER

## CSO FLOW

FLOW  
TOTAL  
(X1000) 0.000 MGD  
1971 GALS

## PLANT INFLUENT FLOW

FLOW  
TOTAL  
(X1000) 14.89 MGD  
631649 GALS

## PLANT EFFLUENT FLOW

FLOW  
TOTAL  
(X1000) 13.17 MGD  
11157114 GALS

FROM COLLECTION  
SYSTEM

CSO DIVERSION  
STRUCTURE

CSO EVENT PLC  
COUNTS SETPOINT  
15 COUNTS

CSO FLOW TOTAL  
RESET SETPOINT  
1000000 1K GALS

MAIN LIFT  
WETWELL

WETWELL CONTROL

52.2 INCHES

PUMP NO. 1

PUMP NO. 2

PUMP NO. 3

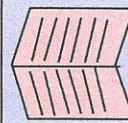
PUMP NO. 4

VFD SPEED  
60.0 Hz.

VFD SPEED  
58.9 Hz.

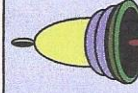
TO  
WWTF

MENU



Ack	Time In	Tagname	Description	Value
<input checked="" type="checkbox"/>	07:28:38.196	MAIN_LFT_INTRUSION	MAIN LIFT INTRUSION	DOOR OPEN
<input checked="" type="checkbox"/>	01:33:55.915	LAHH231	Level in Primary Scum Well HiHi Alarm Bi	HiHi Al
<input checked="" type="checkbox"/>	00:00:00.000			

ALARMS





# CSO FLOW TREND

WASTEWATER TREATMENT FACILITY, CITY OF TAUNTON, MA

3/14/2013

ALARMS

LOGIN

7:52:29 AM

TRENDING MENU

MAIN LIFT

MAIN LIFT LEVEL TREN

MGD

29.19

26.17

23.15

20.13

17.11

14.10

11.08

8.06

5.04

2.02

-1.00

1:52:18 AM  
3/9/2013

1:52:18 AM  
3/10/2013

2:52:18 AM  
3/11/2013

2:52:18 AM  
3/12/2013

2:52:18 AM  
3/13/2013

2:52:18 AM  
3/14/2013

2:52:18 AM  
3/15/2013

2:52:18 AM  
3/16/2013

CSO FLOW (F\_CV)

0.00

TIME

End  
Time  
01:01

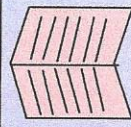
Start  
Time  
20:38

Total - 1,971,000 gals.

08:40 - 11:50  
14:20 - 16:04  
18:21 - 22:00

Back to 24 Hours

MENU



Ack

Time In

Tagname

Description

Value

✓

07:28:38.196

MAIN\_LFT\_INTRUSION

MAIN LIFT INTRUSION

DOOR OPEN

✓

01:33:55.915

LAHH231

Level in Primary Scum Well HiHi Alarm Bit

Level in Primary Scum Well HiHi Alarm Bi

HiHi Al

✓

10:38:48.587

SALL320

Tank Aerator 1C LoLo Alarm Bit

Tank Aerator 1C LoLo Alarm Bit

LoLo Al

✓

10:38:48.415

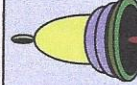
SALL320

Tank Aerator 1C Lo Alarm Bit

Tank Aerator 1C Lo Alarm Bit

Lo Alm

ALARMS





# COMBINED SEWER OVERFLOW

WASTEWATER TREATMENT FACILITY, CITY OF TAUNTON, MA

6/17/2013

7:13:03 AM

LOGIN

MAIN LIFT

HIGH FLOW CONTROL

TO TAUNTON RIVER

## CSO FLOW

FLOW TOTAL (X1000) 0.000 MGD 285 GALS

## PLANT INFLUENT FLOW

FLOW TOTAL (X1000) 12.05 MGD 362935 GALS

## PLANT EFFLUENT FLOW

FLOW TOTAL (X1000) 13.20 MGD 11753429 GALS

FROM COLLECTION SYSTEM

CSO DIVERSION STRUCTURE

MAIN LIFT WETWELL

WETWELL CONTROL

57.0 INCHES

PUMP NO. 1

PUMP NO. 2

PUMP NO. 3

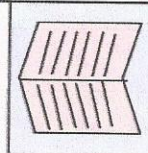
PUMP NO. 4

VFD SPEED 59.9 Hz.

VFD SPEED 0.0 Hz.

TO WWTF

MENU



CSO EVENT PLC COUNTS SETPOINT 15 COUNTS

CSO FLOW TOTAL RESET SETPOINT 1000000 1K GALS

Ack Time In Tagname

09:26:57.687 LAL902

Sodium Bisulfate Chemical Building Tank

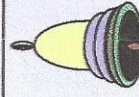
11:59:22.890 SPRING\_DRYWELL\_FLOCSPRING ST PS HIGH WETWELL FLOAT

Value

Lo Alm

ET WELL FL

ALARMS





# CSO FLOW TREND

WASTEWATER TREATMENT FACILITY, CITY OF TAUNTON, MA

6/17/2013

LOGIN

ALARMS

MAIN LIFT

7:13:44 AM

TRENDING MENU

MAIN LIFT LEVEL TREN

MGD

30.00

26.90

23.80

20.70

17.60

14.50

11.40

8.30

5.20

2.10

-1.00

7:13:36 AM  
6/10/2013

CSO FLOW

7:13:36 AM  
6/11/2013

7:13:36 AM  
6/12/2013

7:13:36 AM  
6/13/2013

7:13:36 AM  
6/14/2013

7:13:36 AM  
6/15/2013

7:13:36 AM  
6/16/2013

7:13:36 AM  
6/17/2013

TIME

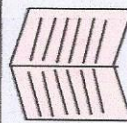
0.00

Start Time  
07:28  
6/14/13

End Time  
07:41:13  
6/14/13

Back to 24 Hours

MENU



Ack

Time In

Tagname

Description

Value

✓

09:26:57.687 LAL902

Sodium Bisulfate Chemical Building Tank

Lo Alm

✓

11:59:22.890 SPRING\_DRYWELL\_FLOC

SPRING ST PS HIGH WET WELL FLOAT

ET WELL FL

✓

10:27:38.875 SPRING\_HIGH\_WW

LEV SPRING ST PS WETWELL HIGH LEVEL

HIGH LEVEL

✓

18:12:16.890 SPRING\_PMP\_1\_FAILURE

SPRING ST PS PUMP #1 FAILURE

FAILURE

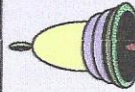
✓

09:26:57.687 LAL902

Sodium Bisulfate Chemical Building Tank

Lo Alm

ALARMS





# COMBINED SEWER OVERFLOW

WASTEWATER TREATMENT FACILITY, CITY OF TAUNTON, MA

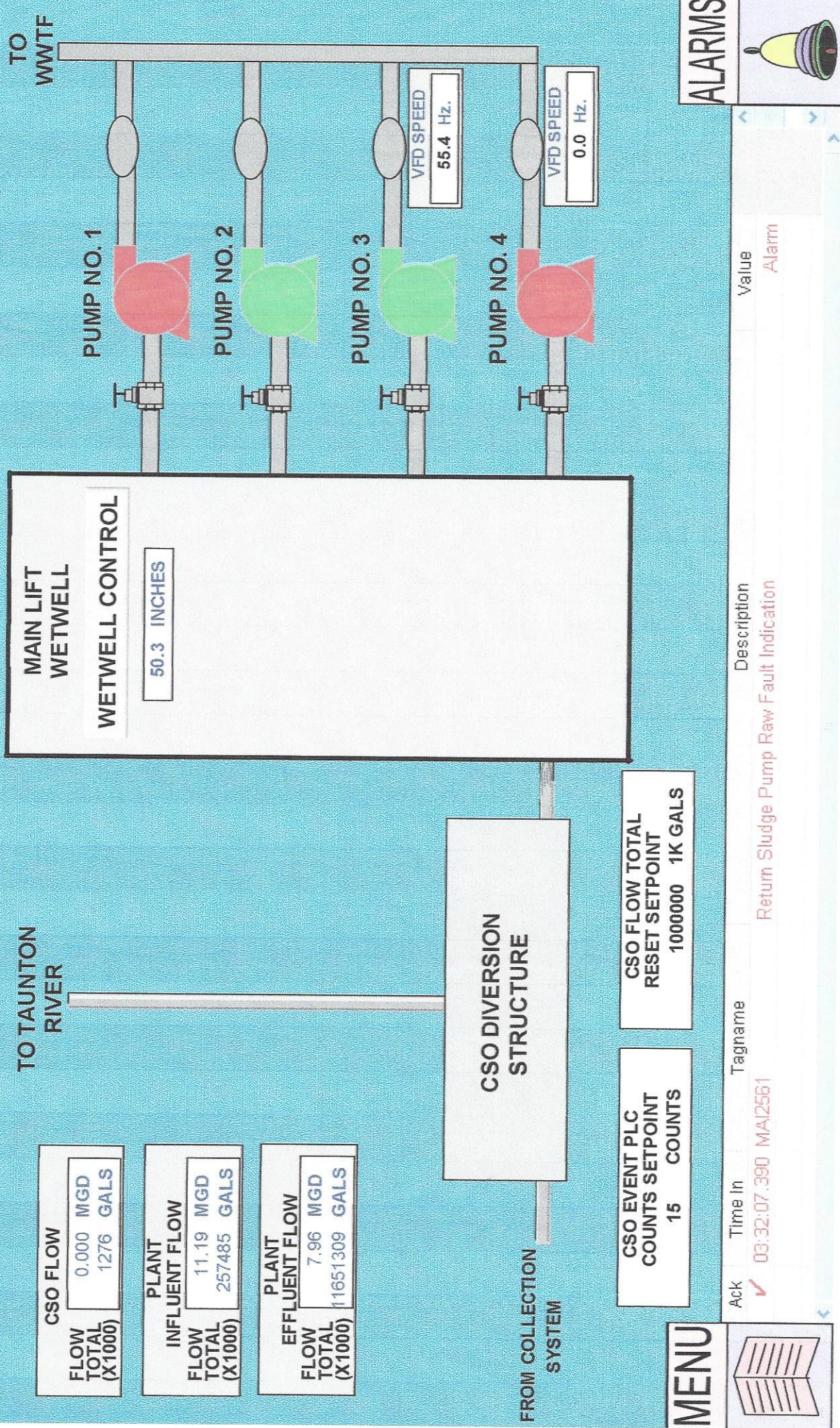
LOGIN

6/9/2013

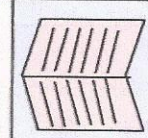
6:35:55 PM

MAIN LIFT

HIGH FLOW CONTROL



MENU



✓

Ack

Time In

Tagname

Description

Value

03:32:07.390 MA/2561

Return Sludge Pump Raw Fault Indication

Alarm



# CSO FLOW TREND

WASTEWATER TREATMENT FACILITY, CITY OF TAUNTON, MA

6/9/2013

ALARMS

MAIN LIFT

LOGIN

6:37:55 PM

TRENDING MENU

MAIN LIFT LEVEL TREND

MGD

30.00

26.90

23.80

20.70

17.60

14.50

11.40

8.30

5.20

2.10

-1.00

6:07:38 PM  
6/7/2013

9:37:38 PM  
6/7/2013

1:07:38 AM  
6/8/2013

4:37:38 AM  
6/8/2013

8:07:38 AM  
6/8/2013

11:37:38 AM  
6/8/2013

3:07:38 PM  
6/8/2013

6:37:38 PM  
6/8/2013

TIME

CSO FLOW

5.80



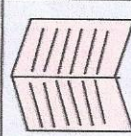
Switch to 7Days

Total Flow to CSO 1276000 gals.

Start Time  
6/7/13 20:45

Stop Time  
6/8/13 14:59

MENU



Ack



Time In

03:32:07.390 MAI2561

Tagname

Description

Return Sludge Pump Raw Fault Indication

Value

Alarm

ALARMS

